

CLAIMS

1. A method for the treatment and/or prophylaxis of carcinoma comprising administering a therapeutically effective amount of an agent which interacts with or modulates the expression or activity of a PTK7 polypeptide.
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2. The method of claim 1, wherein the PTK7 polypeptide:
 - (a) comprises or consists of the amino acid sequence of SEQ ID NO:1; or
 - (b) is a derivative having one or more amino acid substitutions, modifications, deletions or insertions relative to the amino acid sequence of SEQ ID NO:1 which retains the activity of the PTK7 polypeptide.
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3. The method of claim 1 or 2, wherein the agent is an antibody, functionally-active fragment, derivative or analogue thereof.
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4. The method of claim 3, wherein the antibody is monoclonal, polyclonal, chimeric, humanised or bispecific, or is conjugated to a therapeutic moiety, detectable label, second antibody or a fragment thereof, a cytotoxic agent or cytokine.
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5. The use of an antibody as defined in claim 3 or 4, in the manufacture of a medicament for the treatment and/or prophylaxis of carcinoma.
6. The use of a PTK7 polypeptide in the manufacture of a medicament for the treatment and/or prophylaxis of carcinoma.
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7. The use as claimed in claim 6, wherein the composition is a vaccine.
8. A method of screening for anti-carcinoma agents that interact with a PTK7 polypeptide, said method comprising:
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 - (a) contacting said polypeptide with a candidate agent; and
 - (b) determining whether or not the candidate agent interacts with said polypeptide.
9. The method according to claim 8, wherein the determination of an interaction between the candidate agent and PTK7 polypeptide comprises quantitatively detecting binding of the candidate agent and said polypeptide.
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10. A method of screening for anti-carcinoma agents that modulate the expression or activity of a PTK7 polypeptide comprising:
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 - (i) comparing the expression or activity of said polypeptide in the presence of a candidate agent with the expression or activity of said polypeptide in the absence of the candidate agent or in the presence of a control agent; and
 - (ii) determining whether the candidate agent causes the expression or activity of said polypeptide to change.

11. The method of claim 10, wherein the expression or activity of said polypeptide, is compared with a predetermined reference range.
- 5 12. The method of claim 10 or 11, wherein part (ii) additionally comprises selecting an agent which interacts with or modulates the expression or activity of said polypeptide for further testing, or therapeutic or prophylactic use as an anti-carcinoma agent.
13. An agent identified by the method of any of claims 10-12, which interacts with or
0 causes the expression or activity of said polypeptide to change.
14. The use of an agent which interacts with or causes a change in the expression or activity of a PTK7 polypeptide, in the manufacture of a medicament for the treatment and/or prophylaxis of carcinoma.
- 5 15. A method of screening for and/or diagnosis or prognosis of carcinoma in a subject, and/or monitoring the effectiveness of carcinoma therapy, which comprises the step of detecting and/or quantifying, in a biological sample obtained from said subject, a PTK7 polypeptide.
- 10 16. The method of claim 15, wherein the level of said polypeptide is compared to a previously determined reference range or control.
17. The method according to claim 15 or 16, wherein the step of detecting comprises:
15 (a) contacting the sample with a capture reagent that is specific for a PTK7 polypeptide; and
(b) detecting whether binding has occurred between the capture reagent and said polypeptide in the sample.
18. The method according to claim 17, wherein step (b) comprises detecting the
20 captured polypeptide using a directly or indirectly labelled detection reagent.
19. The method according to claim 17 or 18, wherein the capture reagent is immobilised on a solid phase.
- 15 20. The method according to anyone of claims 8 to 12, wherein the polypeptide is detected and/ or quantified using an antibody that specifically binds to a PTK7 polypeptide.
21. The method of claim 20, wherein the antibody is conjugated to a detectable label, or a
25 second antibody or a fragment thereof.
22. A diagnostic kit comprising a capture reagent specific for a PTK7 polypeptide, reagents and instructions for use.

23. The method of any one of claims 1-4, 8-12, or 15-21, or the use any one of claims 5-7 or 14, wherein the carcinoma is breast, ovarian, pancreatic, lung, bladder or kidney cancer or osteosarcoma.
- 5 24. The method of any one of claims 1-4, 8-12, or 15-21, or the use any one of claims 5-7 or 14, wherein the carcinoma is breast cancer.